WOSC10

PREVIEW QUESTION BANK

Module Name : Life Sciences and Biotechnology-E
Exam Date : 25-Mar-2018   Batch : 11:00-13:00

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
		Objective Question		
1	1	Fedaration Cup, World Cup, Allwyn International Trophy and Challenge Cup are awarded to winners of A1: Tennis **A2: Volleyball – (Correct Alternative)** A3: Basketball A4: Cricket	1.0	0.25
		Objective Question		
2	2	Which is the first country in the world to use drones for national mail service? A1: Russia	1.0	0.25

		A2: **France – (Correct Alternative)**		
		A3: Sweden		
		A4: China		

Objective Question

| 3 | 3 | Consider the following materials/objects:

A. Cornea

B. Diamond

C. Silicon

D. Sodium Chloride

The above materials/objects when arranged in increasing order of refractive index would be as follows: | 1.0 | 0.25 |
|---|---|---|---|---|
| | | A1: ADCB | | |
| | | **A2:** **ADBC – (Correct Alternative)** | | |
| | | A3: DABC | | |
| | | A4: DACB | | |

Objective Question

4	4	Various developed countries often claim that cattles in less developed countries are responsible for huge release of green house gases, thus causing green house effect. The developed countries often use this logic that these countries have lot of low yield cattle and if high yield cattle are adopted on a large basis, then release of significant amount of greenhouse gases can be checked from releasing in the atmosphere. Cattles release the greenhouse gases due to:	1.0	0.25

	A1 Methanogenic bacteria in the stomach – (Correct **: Alternative)**		
	A2 : Improper handling of cow waste (eg: cow-dung, urine,etc.)		
	A3 : Improper handling of leftover fodder		
	A4 : High use of chemical fertilizers in agriculture		

Objective Question

5	5	Consider the following statements and select the wrong option	1.0	0.25
		A1 If a person is stung by a honeybee it causes pain and : irritation. In such case, if baking soda is applied to the area, it provides relief to the person.		
		A2 : Vitamin E is helpful in relief from sunburns		
		A3 On various sunscreen creams/lotions SPF is mentioned. **: SPF stands for Sun Protection Factor. SPF 20 means that** **the lotion is protecting you from 20% of the harmful UV** **radiations in the sunlight. – (Correct Alternative)**		
		A4 Vitamin D is required for the absorption of calcium by human : beings		

Objective Question

6	6		1.0	0.25

Following are some observed natural phenomena :

A. Mirage seen in places like deserts

B. In winter sound of a whistle of a railway engine is heard at much longer distances

C. Twinkling of a star in night as seen by naked eye

D. Visibility of sun for some time after the sunset

Which of the above natural phenomena are related to the variation in density of atmospheric air?

A1: ABD

A2: BCD

A3: ABCD – (Correct Alternative)

A4: None of these

Objective Question				
7	7	The following are some common diseases: A. Diphtheria B. Rabies C. Cholera D. Malaria Which of the above diseases are not caused by Virus? A1: ABC A2 BCD	1.0	0.25

:

A3 ADC – (Correct Alternative)
:

A4
: ABD

Objective Question

| 8 | 8 | Which of the following is Greenhouse gas? | 1.0 | 0.25 |

A1
: Carbon Monoxide

A2 Carbon Dioxide – (Correct Alternative)
:

A3
: Sulphur Dioxide

A4
: Chlorine

Objective Question

| 9 | 9 | Tuberculosis is caused due to | 1.0 | 0.25 |

A1 Bacteria – (Correct Alternative)
:

A2
: Virus

A3
: Fungus

A4
: None of the above

		Objective Question		
10	10	United Nations Headquarter is situated at	1.0	0.25
		A1: Geneva		
		A2: Washington D.C.		
		A3: New York – (Correct Alternative)		
		A4: Paris		

		Objective Question		
11	11	A seller gives a discount of 25% on a product with MRP marked INR 3680. He earns a profit of 15% over its cost price in this transaction. Cost price of the product is	1.0	0.25
		A1: 2100		
		A2: 2200		
		A3: 2300		
		A4: 2400 – (Correct Alternative)		

		Objective Question		
12	12	The side of a rectangular field is in ratio 4:5. Area of the field is 12500 sq mt. If the cost of fencing is INR 5/meter, how much it will cost to fence entire field?	1.0	0.25
		A1: INR 61,000		

A2
: **INR 62,500 – (Correct Alternative)**

A3
: INR 63,500

A4
: INR 65,000

Objective Question

13	13	A box has 3 red, 2 yellow and 5 green balls. If two balls are drawn at random, what is the probability that both are yellow balls?	1.0	0.25

A1
: **1⁄45 – (Correct Alternative)**

A2
: 5⁄18

A3
: 3⁄31

A4
: 2⁄9

Objective Question

14	14	If X and Y together can do a piece of work in 6 days. X alone can do the same work in 15 days. What time will Y take to do the same work alone?	1.0	0.25

A1
: 8 days

A2
: 9 days

A3
: **10 days – (Correct Alternative)**

A4
: 12 days

Objective Question

| 15 | 15 | If a solid sphere of radius 15 cm is molded into 27 spherical smaller solid balls of equal radius, then the surface area of each smaller ball is | 1.0 | 0.25 |

A1
: **$100\Omega cm^2$ – (Correct Alternative)**

A2
: $105\Omega cm^2$

A3
: $110\ \Omega cm^2$

A4
: $115\Omega cm^2$

Objective Question

| 16 | 16 | Three six-sided dice are rolled simultaneously, what is the probability of getting a different number on each dice? | 1.0 | 0.25 |

A1
: 1⁄3

A2
: 2⁄3

A3
: 4⁄9

A4
: **5⁄9 – (Correct Alternative)**

Objective Question

| 17 | 17 | The speed of a boat is 20 km/hr in still water. If the river is running at 5 km/hr, it takes boat 96 minutes to go to a place and come back to initial position. How far is the place from the initial point? | 1.0 | 0.25 |

A1 : 12 km

A2 : 13 km

A3 : 15 km – (Correct Alternative)

A4 : 18 km

Objective Question

| 18 | 18 | What is the probability of drawing an Ace or a King from a deck of 52 cards? | 1.0 | 0.25 |

A1 : 1/13

A2 : 2/13 – (Correct Alternative)

A3 : 1/52

A4 : 1/26

Objective Question

| 19 | 19 | A cricketer has an average of 55 runs in 5 innings. Find out how many runs she needed to score in her sixth innings to raise her average to 60 runs? | 1.0 | 0.25 |

A1: 60

A2: 75

A3: 80

A4: 85 – (Correct Alternative)

Objective Question

| 20 | 20 | The LCM of two numbers is 900 and their HCF is 50. If one of the numbers is 450, the other is | 1.0 | 0.25 |

A1: 120

A2: 100 – (Correct Alternative)

A3: 125

A4: 150

Objective Question

| 21 | 21 | If you write an original software, what type of IP rights you can get to make and sell copies of your work? | 1.0 | 0.25 |

A1: Copyright – (Correct Alternative)

A2: Patents

| | | A3: Registered Designs | | |
| | | A4: Trademarks | | |

Objective Question

22	22	International organization with objective to encourage creative activity and to promote intellectual property throughout world is	1.0	0.25
		A1: WIPO – (Correct Alternative)		
		A2: World Bank		
		A3: WTO		
		A4: UNDP		

Objective Question

23	23	_____ is a form of intellectual property that protects the expression of ideas	1.0	0.25
		A1: Trade name		
		A2: Copyright – (Correct Alternative)		
		A3: Patent		
		A4: Trade Mark		

Objective Question				
24	24	A formula, process, device or other business information that has commercial value and is kept confidential to maintain an advantage over competitors is known as a:	1.0	0.25
		A1: Patent		
		A2: Trade secret – (Correct Alternative)		
		A3: Copyright		
		A4: Trade Mark		

Objective Question				
25	25	Fair use allows you to use a limited amount of copyrighted material for your educational use. Which step below does NOT pass the fair use test?	1.0	0.25
		A1: Will be used for a non-profit educational purpose		
		A2: Will be used on a Web page – (Correct Alternative)		
		A3: Will only use a small portion		
		A4: Will not deprive the author from making money		

Objective Question				
26	26	Term of patent in India is	1.0	0.25
		A1: 15 years		

		A2: 25 years			
		A3: 20 years – (Correct Alternative)			
		A4: 10 years			

Objective Question

27	27	What does a trademark protect?	1.0	0.25
		A1: An invention		
		A2: a work of art		
		A3: logos, names and brands – (Correct Alternative)		
		A4: the look, shape and feel of a product		

Objective Question

28	28	If a company develops a new technology that improves its main product, what type of intellectual property can they use to stop others from copying their invention ?	1.0	0.25
		A1: Copyright		
		A2: Geographical indications		
		A3: Patents – (Correct Alternative)		

| | | A4: | Trademarks | | |

Objective Question

29	29	A patent awarded by the patent office in Japan is valid in:	1.0	0.25

A1: Indonesia

A2: Japan – (Correct Alternative)

A3: All ASEAN countries

A4: All countries that adhere to TRIPS

Objective Question

30	30	Which of the following is NOT a basic requirement for a patent?	1.0	0.25

A1: It must have utility

A2: It must be novel

A3: It must not be obvious to a person of ordinary skill in the field

A4: It must be extraordinary creative – (Correct Alternative)

Objective Question

31	31	Choose the word or phrase that is most nearly opposite in meaning to the word in capital letter . LICENSED:	1.0	0.25

A1 Unnoticed
:

A2 unwritten
:

A3 not formally authorised – (Correct Alternative)
:

A4 not properly trained
:

Objective Question		
32	32	Clear the jumble and select a grammatically correct sentence which also makes sense. To/ pay/ fifty/ rupees/ much/ too/ was/ me/ for/ thousand/ just	1.0	0.25

A1 Fifty thousand rupees was just too much for me to pay –
: (Correct Alternative)

A2 Pay just fifty thousand rupees to me was too much
:

A3 Fifty thousand rupees was too much just to pay for me
:

A4 To pay just fifty thousand rupees was too much for me
:

Objective Question		
33	33	Select the word or set of words that <u>best</u> completes the following sentence. Because our supply of fossil fuel has been sadly ___, we must find ___ source of energy.	1.0	0.25

A1 stored…..hoarded
:

A2 compensated……significant
:

A3
: exhausted….inefficient

**A4
: depleted…..alternate – (Correct Alternative)**

Objective Question

| 34 | 34 | Tick the word <u>closest</u> in meaning to the word in *italics* -
an *audacious* attempt | 1.0 | 0.25 |

A1
: useless

A2
: foolish

**A3
: bold – (Correct Alternative)**

A4
: crazy

Objective Question

| 35 | 35 | Choose the most appropriate word to complete the following sentence:
There is a _____ of cows in the next field. | 1.0 | 0.25 |

A1
: Flock

A2
: Swarm

A3
: Group

A4 Herd – (Correct Alternative)

		:		

Objective Question

36	36	Choose the phrase which fits the sentence best : The bus _____ coming.	1.0	0.25
		A1 : Will		
		A2 : Has		
		A3 : Is – (Correct Alternative)		
		A4 : On		

Objective Question

37	37	Choose the correctly spelt word:	1.0	0.25
		A1 : adversity – (Correct Alternative)		
		A2 : adeversity		
		A3 : advercity		
		A4 : aedversity		

Objective Question

38	38	Which of the following words best explains the phrase given below? One who abandons his religious faith.	1.0	0.25

A1
: traitor

**A2
: apostate – (Correct Alternative)**

A3
: prostrate

A4
: blasphemer

Objective Question				

39	39	Select the word that is most appropriate to complete the sentence: He was blind _____ one eye.	1.0	0.25

A1
: with

A2
: along

**A3
: in – (Correct Alternative)**

A4
: on

Objective Question				

40	40	Choose the word or phrase that is most nearly opposite in meaning to the given word. **Widely**	1.0	0.25

**A1
: narrowly – (Correct Alternative)**

A2
: spaciously

	A3 :	broadly
	A4 :	relatively

Objective Question

41	41	Which of the following are prime numbers?	1.0	0.25
		A1 : 1,3,5		
		A2 : 1,5,7		
		A3 : 2,3,5 – (Correct Alternative)		
		A4 : 1,7,9		

Objective Question

42	42	A watch which gains 5 seconds in 3 minutes was set right at 7 a.m. In the afternoon of the same day, when the watch indicated quarter past 4 o'clock, the true time is	1.0	0.25
		A1 : $59\frac{7}{11}$ min. past 3 p.m.		
		A2 : 4 P.M. – (Correct Alternative)		
		A3 : $58\frac{7}{11}$ min., past 3 p.m.		
		A4 : $2\frac{3}{11}$ min. past 4 p.m		

Objective Question

| 43 | 43 | In a shower, 5 cm of rain falls. The volume of water that falls on 1.5 hectares of ground is | 1.0 | 0.25 |

A1: 75 cu. m

A2: 750 cu. m – (Correct Alternative)

A3: 7500 cu. m

A4: 75000 cu. m

Objective Question

| 44 | 44 | The total time taken by a boatman to row his boat upstream and downstream distance of 56 km together is 12 hours. The difference between times taken by him to row his boat another upstream and downstream distance of 42 km is 3 hours. Find the speed of boat and stream. | 1.0 | 0.25 |

A1: 12.5 kmph, 1.5 kmph

A2: 11.5 kmph, 2.5 kmph

A3: 9.5 kmph, 4.5 kmph

A4: 10.5 kmph, 3.5 kmph – (Correct Alternative)

Objective Question

| 45 | 45 | A says to B "I am twice as old as you were when I was as old as you are". The sum of their ages is 56 years. Find the difference of their ages. | 1.0 | 0.25 |

| A1: | 9 |

| A2: | 11 |

| A3: | 13 |

A4: 8 – (Correct Alternative)

Objective Question

| 46 | 46 | A container contains 40 litres of milk. From this container 4 litres of milk was taken out and replaced by water. This process was repeated further two times. How much milk is now contained by the container? | 1.0 | 0.25 |

| A1: | 26.16 |

| A2: | 28.16 |

A3: 29.16 – (Correct Alternative)

| A4: | 30.16 |

Objective Question

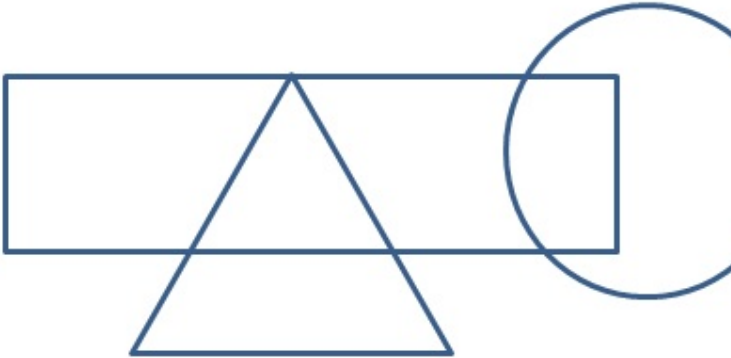| 47 | 47 | How many times is the HCF of 48, 36, 72, and 24 contained in their LCM? | 1.0 | 0.25 |

| A1: | 8 times |

A2 16 times

:

A3 **12 times – (Correct Alternative)**
:

A4 4 times
:

Objective Question

| 48 | 48 | In how many different ways can the letters of the word 'OPTICAL' be arranged so that the vowels always come together? | 1.0 | 0.25 |

A1 120
:

A2 **720 – (Correct Alternative)**
:

A3 4320
:

A4 1440
:

Objective Question

| 49 | 49 | Tea worth Rs. 126 per kg and Rs. 135 per kg are mixed with a third variety in the ratio 1:1:2. If the mixture is worth Rs. 153 per kg, the price of the third variety per kg will be: | 1.0 | 0.25 |

A1 Rs. 169.50
:

A2 Rs. 170
:

A3 Rs. 180
:

| | | **A4:** **Rs. 175.50 – (Correct Alternative)** | | |

Objective Question

50	50	In an exam, Class A scored an average of 50 marks with standard deviation of 5. Class B scored an average of 50 with standard deviation of 9. Which of the following statements is true?	1.0	0.25
		A1: Class B has more students than Class A.		
		A2: Class A has more students than Class B		
		A3: Class A has more outlier students than Class B		
		A4: Class B has more outlier students than Class A – (Correct Alternative)		

Objective Question

51	51	C is favorite child of F. C is fond of her younger brother B. B is not the only sibling of A. F loves her father M. What is A to M?	1.0	0.25
		A1: **Grand child – (Correct Alternative)**		
		A2: Grand parent		
		A3: No relation		
		A4: Parent		

Objective Question

| 52 | 52 | If HEN = 124; WIRE = 9752; and RAT = 538, EATEN is | 1. | 0.2 |

_____?

| | | | 0 | 5 |

A1: 28324

A2: 23874

A3: 23824 – (Correct Alternative)

A4: 42832

Objective Question

| 53 | 53 | A pen was marked as Rs 1000. After a good negotiation, I bought it at a discount of 20%. Now I am offering the same pen at 20% profit. What is the difference between the new price and old price? | 1.0 | 0.25 |

A1: Rs. 160

A2: Rs. 200

A3: Rs. 40 – (Correct Alternative)

A4: No difference

Objective Question

| 54 | 54 | In Roman numerals, M, L, and XL stand for _____. | 1.0 | 0.25 |

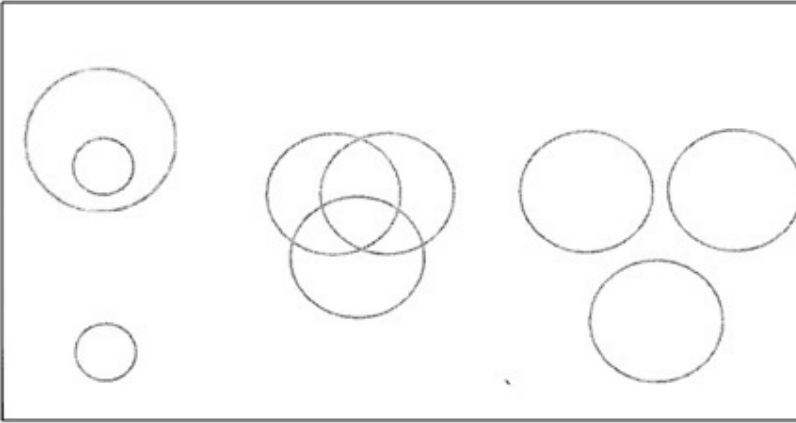**A1: 1000, 50, 40 – (Correct Alternative)**

A2 :	40, 42, 44
A3 :	30, 40, 50
A4 :	1000, 40, 50

Objective Question

55	55		1. 0	0.2 5

In the following diagram, triangle represents mathematicians, red programmers and circle represents philosophers. Which of the follow incorrect?

A1 : Some of the philosophers are programmers.

A2 : Some of the programmers are mathematicians.

A3 Some of the mathematicians are philosophers. – (Correct
: Alternative)

A4 : Some of the programmers are not mathematicians

Objective Question

56	56		1.	0.2

				0	5

Which of the diagrams best fits the association betwee[n] Sparrow.

A   B   C

A1 : A – (Correct Alternative)

A2 : B

A3 : C

A4 : D

Objective Question						
57	57	A person walks at 10km/h for 6hr and at 8km/h for 12hr. Her average speed is _____ km/h	1. 0	0.2 5

A1 : 6.22

A2 8.67 – (Correct Alternative)

:

A3
: 3.77

A4
: 9

Objective Question

| 58 | 58 | If K and M together own 1750 balls. If 4⁄25 of K's share is equal to 2⁄5 of M's share, how many balls M have? | 1.0 | 0.25 |

A1
: 1250

**A2
: 500 – (Correct Alternative)**

A3
: 750

A4
: 1050

Objective Question

| 59 | 59 | A large number of people suffer from Dengue every year in India. Dengue is spread by female mosquitoes during the day time. Dengue can be prevented by avoiding all chances of mosquitoes breeding. The para best supports the statement that | 1.0 | 0.25 |

A1
: Male mosquitoes do not spread diseases

A2
: People should not step out during the day time

**A3 Mosquitoes breeding should be stopped – (Correct
: Alternative)**

		A4: Dengue is the only diseases that affects Indian people		

Objective Question

60	60	A player was asked to run around the circular cricket ground as punishment. The coach was standing at the exact center of the ground which was 100 M from the boundary. How much distance does the player cover in one round?	1.0	0.25
		A1: 200.8		
		A2: 628.32 – (Correct Alternative)		
		A3: 800.8		
		A4: 400.4		

Objective Question

61	61	Bacterial enzyme that cut DNA at specific sites within the DNA molecule called	1.0	0.25
		A1: Exonuclease		
		A2: Restriction endonuclease II – (Correct Alternative)		
		A3: Methylase		
		A4: Transferase		

Objective Question

62	62	Sequences that read same on both the strands of DNA in either direction are known as	1.0	0.25

A1: **Palindromes – (Correct Alternative)**

A2: Sticky ends

A3: Blunt ends

A4: Recognition sequence

Objective Question

63	63	The Maxam Gilbert method of nucleotide sequence is based on	1.0	0.25

A1: PCR

A2: **Chemical degradation – (Correct Alternative)**

A3: DNA replication

A4: None of the above

Objective Question

64	64	Which of the following analysis tool can be used to compare an amino acid sequence of an unknown protein to a nucleotide sequence encoding a known protein?	1.0	0.25

A1: BLASTn

		A2: BLASTp		
		A3: tBLAST		
		A4: BLASTx – (Correct Alternative)		

Objective Question

65	65	During aminoacylation of tRNA, amino acids are activated by	1.0	0.25
		A1: ATP – (Correct Alternative)		
		A2: AMP		
		A3: GTP		
		A4: Amino acyl tRNA synthetase		

Objective Question

66	66	Neomycin phosphotransferase gene which is used as selectable marker inactivates which of the following antibiotic?	1.0	0.25
		A1: Hygromucin		
		A2: Ampicillin		
		A3: Streptomycin		
		A4 Kanamycin – (Correct Alternative)		

		:		

Objective Question

67	67	pBIN19 is an example of	1.0	0.25

A1 : Co-integrate vector

A2 : Expression vector

A3 : Binary vector – (Correct Alternative)

A4 : None of these

Objective Question

68	68	Distance between two successive nitrogenous bases or base pairs of DNA is	1.0	0.25

A1 : 34 A°

A2 : 3.4 A° – (Correct Alternative)

A3 : 0.34 A°

A4 : 20 A°

Objective Question

69	69	Enzyme required for removing RNA primer during DNA replication is	1.0	0.25

A1 DNA primase

:

A2 DNA ligase
:

A3 **DNA polymerase I – (Correct Alternative)**
:

A4 DNA polymerase III
:

Objective Question

70	70	QTL analysis is used to	1.0	0.25

A1 identify RNA polymerase binding sites
:

A2 map genes in bacterial viruses
:

A3 determine which genes are expressed at a developmental
: stage

A4 identify chromosome regions associated with a complex
: trait in a genetic cross – (Correct Alternative)

Objective Question

71	71	Which of the followings is transcriptionally inactive region in a chromosome?	1.0	0.25

A1 **Satellite DNA – (Correct Alternative)**
:

A2 Region devoid of nucleosomes
:

A3 Long regions of DNase I sensitivity
:

		A4: Beads on string region		

Objective Question

72	72	Portions of the genome having sequences similar to functional genes but that lack control regions are referred to as	1.0	0.25
		A1: tandemly repetitive DNA		
		A2: interspersed repetitive DNA		
		A3: multigene family		
		A4: pseudogenes – (Correct Alternative)		

Objective Question

73	73	In which of the following methods of plant transformation, multicopy gene integration is a common feature?	1.0	0.25
		A1: Agrobacterium mediated transformation		
		A2: Particle bombardment – (Correct Alternative)		
		A3: Electroporation		
		A4: PEG mediated transformation		

Objective Question

74	74	If the goal is to create a plant resistant to a pathogen, which cell	1.	0.2

based plant technology would be most effective | 0 | 5

A1: clonal propagation

A2: cybridization

A3: protoplast fusion

A4: somaclonal selection – (Correct Alternative)

Objective Question

| 75 | 75 | Which of the following is not an essential amino acid? | 1.0 | 0.25 |

A1: Proline – (Correct Alternative)

A2: Histidine

A3: Leucine

A4: Methionine

Objective Question

| 76 | 76 | For development of selection marker free transgenic plants by co-transformation using Agrobacterium, the marker genes are | 1.0 | 0.25 |

A1: segregated out in T0 generation

A2: excised out in T0 generation

A3: **segregated out in T1 generation – (Correct Alternative)**

A4: excised out in T1 generation

Objective Question

77	77	lambda phage vector can carry up to	1.0	0.25

A1: **20 kb fragment – (Correct Alternative)**

A2: 30 kb fragment

A3: 40 kb fragment

A4: 50 kb fragment

Objective Question

78	78	Which of the following is not involved in translating information in to protein?	1.0	0.25

A1: rRNA

A2: **si RNA – (Correct Alternative)**

A3: mRNA

A4: tRNA

Objective Question				
79	79	A 20mer DNA contains A,G and C only. In how many ways can this DNA sequence be constructed? A1: 4^{20} A2: 20^4 **A3: 3^{20} – (Correct Alternative)** A4: 20^3	1.0	0.25

Objective Question				
80	80	Which of the following can be used for amino acid sequencing of a purified protein present in proteome? A1: Mass spectrometry **A2: Tandem mass spectrometry – (Correct Alternative)** A3: 3D PAGE A4: MALDI-TOF	1.0	0.25

Objective Question				
81	81	Which of the following staining methods is used to visualize protein samples separated on polyacrylamide gel? A1: Ethidium bromide	1.0	0.25

		A2: FITC **A3: Coommassie brilliant blue – (Correct Alternative)** A4: SYBR Green		

Objective Question

82	82	Which of the following human disease is caused by deposition of amyloid fibrils? A1: Sickle cell anemia **A2: Alzheimer's disease – (Correct Alternative)** A3: xeroderma pigmentosus A4: Bright's disease	1.0	0.25

Objective Question

83	83	The oxygen binding curve for hemoglobin is **A1: Sigmoidal – (Correct Alternative)** A2: Hyperbolic A3: Straight line passing through origin	1.0	0.25

		A4 : Straight line not passing through origin		

Objective Question

84	84	The aqueous compartment between the plasma membrane and peptigoglycan cell wall in bacteria is called	1.0	0.25
		A1 : Cytoplasm		
		A2 : Lysosome		
		A3 : Periplasmic space – (Correct Alternative)		
		A4 : endosome		

Objective Question

85	85	If an enzyme inhibitor binds only to the enzyme-substrate complex, the type of inhibition is known as	1.0	0.25
		A1 : Competitive inhibition		
		A2 : Uncompetitive inhibition – (Correct Alternative)		
		A3 : Non competitive inhibition		
		A4 : Mixed inhibition		

Objective Question

86	86	If the secretion from one cell affects only the neighboring cells, the type of secretion is known as	1.0	0.25

A1: Autocrine

A2: Paracrine – (Correct Alternative)

A3: Endocrine

A4: Exocrine

Objective Question

| 87 | 87 | Two positively charged amino acids present in protein molecule are | 1.0 | 0.25 |

A1: arginine and lysine – (Correct Alternative)

A2: arginine and asparagine

A3: asparagine and phenyl alanine

A4: histidine and tyrosine

Objective Question

| 88 | 88 | The isoelectric point (pI) of a protein is 8.8. At a pH of 7, the protein will be | 1.0 | 0.25 |

A1: Negatively charged

A2: Positively charged – (Correct Alternative)

		A3: Neutral		
		A4: Denatured		

Objective Question

89	89	Programmed cell death is also known as	1.0	0.25
		A1: Necrosis		
		A2: Exocytosis		
		A3: Phagocytosis		
		A4: Apoptosis – (Correct Alternative)		

Objective Question

90	90	The pathway through which non carbohydrate precursors are converted to glucose is known as	1.0	0.25
		A1: Glycolysis		
		A2: TCA cycle		
		A3: Gluconeogenesis – (Correct Alternative)		
		A4: Glycosylation		

		Objective Question		
91	91	Appearance of malarial fever in a patient is accompanied with the release of:	1.0	0.25
		A1: **Merozoites from RBC – (Correct Alternative)**		
		A2: Maemozoin from RBC		
		A3: Mchuffner's granules		
		A4: Globulin		

		Objective Question		
92	92	Kappa particles are found in:	1.0	0.25
		A1: Euglena		
		A2: **Paramecium – (Correct Alternative)**		
		A3: Volvox		
		A4: Trichomonas		

		Objective Question		
93	93	Sea cucumber belong to the class	1.0	0.25
		A1: Crinoidea		
		A2 Holothuroidea – (Correct Alternative)		

		:		
		A3 : Echinoidea		
		A4 : Ophiuroidea		

Objective Question

94	94	In birds egg can be categorized as	1.0	0.25
		A1 : Isolecithal		
		A2 : Telolecithal – (Correct Alternative)		
		A3 : Homolecithal		
		A4 : Teleolecithal		

Objective Question

95	95	Crossing over occurs during:	1.0	0.25
		A1 : Pachytene – (Correct Alternative)		
		A2 : Diplotene		
		A3 : Diakinesis		
		A4 : Telophase		

Objective Question				
96	96	Morphogenetic movements start in the embryo during:	1.0	0.25

A1: Blastulation

A2: Gastrulation – (Correct Alternative)

A3: Tubulation

A4: Neurulation

Objective Question				
97	97	Metamorphosis can be introduced artificially by injecting	1.0	0.25

A1: Adrenaline

A2: Thyroxine – (Correct Alternative)

A3: F.S.H

A4: L.H

Objective Question				
98	98	Axolotl is the larva of:	1.0	0.25

A1: Ambystoma – (Correct Alternative)

A2: Salamander

		A3: Necturus		
		A4: Proteus		

Objective Question

99	99	Which of the following helps in respiration of aquatic mammals	1.0	0.25
		A1: Organ of corti		
		A2: Bursa fabricii		
		A3: Gill Lamellae		
		A4: Retia mirabilia – (Correct Alternative)		

Objective Question

100	100	The transitional heart is seen in	1.0	0.25
		A1: Fishes		
		A2: Amphibians		
		A3: Reptiles – (Correct Alternative)		
		A4: Birds		

Objective Question

10 1	101	The condition in which body suffer from acute shortage of oxygen is called	1.0	0.25
		A1 : Anemia		
		A2 : Hypoxia – (Correct Alternative)		
		A3 : Deoxygenation		
		A4 : Detoxification		

Objective Question

10 2	102	Hypertrichosis is characterised by	1.0	0.25
		A1 : Haemophilia		
		A2 : Presence of scales in the sklin		
		A3 : Presence of hairs in the pinna – (Correct Alternative)		
		A4 : All of these		

Objective Question

10 3	103	Southern blotting	1.0	0.25
		A1 : Is used to detect a specific DNA fragment – (Correct Alternative)		
		A2 : Is used to detect a specific RNA fragment		

| A3: | Is used to detect a specific poly peptide fragment |
| A4: | Is a technique for separating nucleic acid fragments |

Objective Question

104	104	The stable community at the end of ecological succession is called	1.0	0.25
		A1: Pioneer community		
		A2: Stable community		
		A3: Climax community – (Correct Alternative)		
		A4: Species		

Objective Question

105	105	The primary consumers in a pond ecosystem is	1.0	0.25
		A1: Phytoplanktons		
		A2: Zooplanktons – (Correct Alternative)		
		A3: Fishes		
		A4: Bacteria		

Objective Question				
106	106	A photobiont in lichens is/are	1.0	0.25
		A1: Green algae only		
		A2: Green or blue-green algae – (Correct Alternative)		
		A3: Blue-green algae only		
		A4: A fungus		

Objective Question				
107	107	Which fungus is used as a biocontrol agent against fungal diseases?	1.0	0.25
		A1: Coprinus cinereus		
		A2: Trichoderma harzianum – (Correct Alternative)		
		A3: Alternaria solani		
		A4: Agaricus bisporus		

Objective Question				
108	108	Living materials can be studied by	1.0	0.25
		A1: Phase contrast microscopy		
		A2 Dark field microscopy		

:

A3 Interference microscopy
:

A4 All of these – (Correct Alternative)
:

Objective Question

109	109	Cultivated bananas are sterile because	1.0	0.25

A1 Male flowers are not produced
:

A2 Pollinators are not available
:

A3 They are triploid and therefore seeds are not set –
: (Correct Alternative)

A4 Female flowers are not produced
:

Objective Question

110	110	Stomata are completely absent in the plants which are	1.0	0.25

A1 Submerged aquatics – (Correct Alternative)
:

A2 Grasses
:

A3 Conifers
:

A4 Floating leaf aquatics
:

		Objective Question		
11 1	111	Which technique will be suitable for conservation of a plant species of which few individuals are remaining in nature? A1 : ELISA A2 : Gene cloning **A3** : **Micropropagation – (Correct Alternative)** A4 : Mutation	1. 0	0.2 5
		Objective Question		
11 2	112	Centi Morgan is the unit to measure A1 : Radiocativity A2 : Efficiency of nucleases **A3** : **Distance between two genes – (Correct Alternative)** A4 : Length of DNA	1. 0	0.2 5
		Objective Question		
11 3	113	Okazaki fragments are formed on **A1** : **Lagging strand of DNA – (Correct Alternative)** A2 Leading strand of DNA	1. 0	0.2 5

		:		
		A3 : Both leading and lagging strands of DNA		
		A4 : Only on uncoiled DNA double helix		

Objective Question

11 4	114	When a diploid embryo sac is formed from a megaspore mother cell without a regular meiotic division, then the process is called	1. 0	0.2 5
		A1 : Parthenogamy		
		A2 : Polysperny		
		A3 : Polygamy		
		A4 : Diplospory – (Correct Alternative)		

Objective Question

11 5	115	A corm is a	1. 0	0.2 5
		A1 : Modified stem – (Correct Alternative)		
		A2 : Modified root		
		A3 : Normal root		
		A4 : Normal stem		

		Objective Question		
116	116	The largest family of the angiosperms in the world is	1.0	0.25
		A1: Rubiaceae		
		A2: Orchidaceae		
		A3: Rosaceae		
		A4: Asteraceae – (Correct Alternative)		
		Objective Question		
117	117	Ethyl methane sulfonate (EMS) acts as a	1.0	0.25
		A1: Base analog		
		A2: Deaminating agent		
		A3: Alkylating agent – (Correct Alternative)		
		A4: Intercalating agent		
		Objective Question		
118	118	Artificial seeds refers to	1.0	0.25
		A1: Seeds synthesized with recombinant DNA technology		

		A2 Somatic embryos encapsulated in a gel – (Correct : **Alternative)**		
		A3 : Seeds of synthetic plants		
		A4 : All of these		

Objective Question

119	119	Which region of India is recognized as 'Cradle of Speciation'?	1.0	0.25
		A1 : Eastern Himalayas – (Correct Alternative)		
		A2 : Western Himalayas		
		A3 : Eastern Ghats		
		A4 : Western Ghats		

Objective Question

120	120	In which of the following organelle of a cell contain high content of acid phosphatases?	1.0	0.25
		A1 : Golgi bodies		
		A2 : Lysosomes – (Correct Alternative)		
		A3 : Mitochondria		
		A4 Endoplasmic reticulum		

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